

FIG. 4

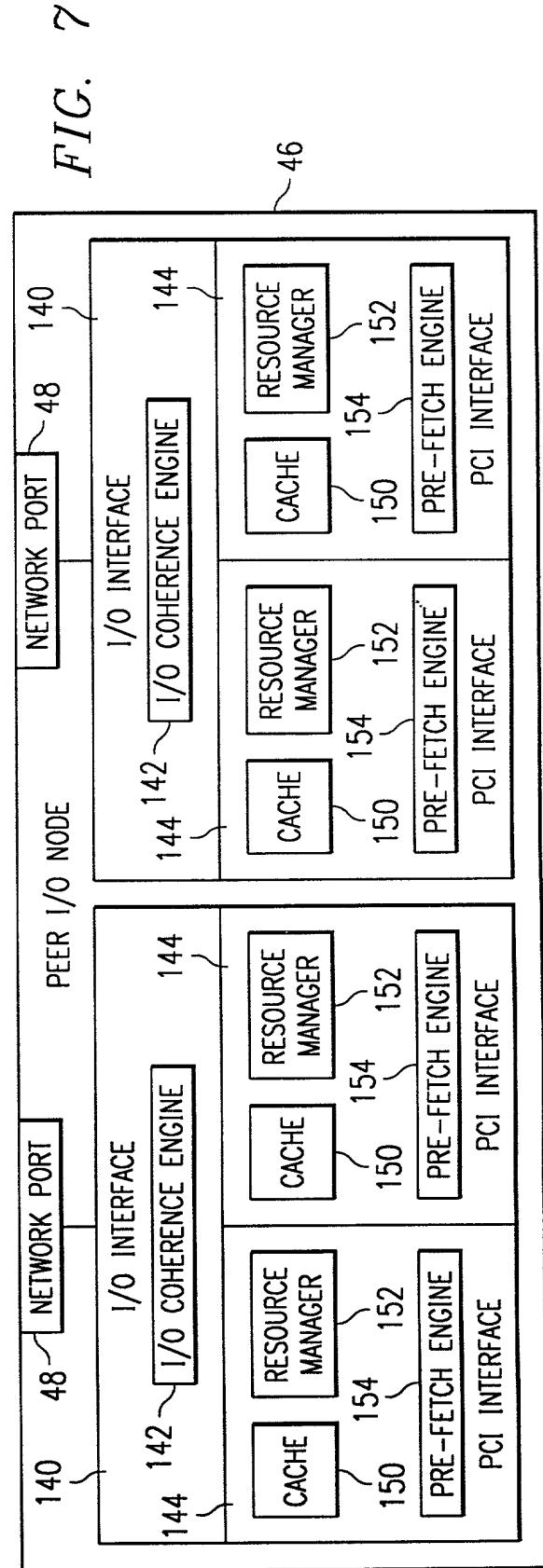
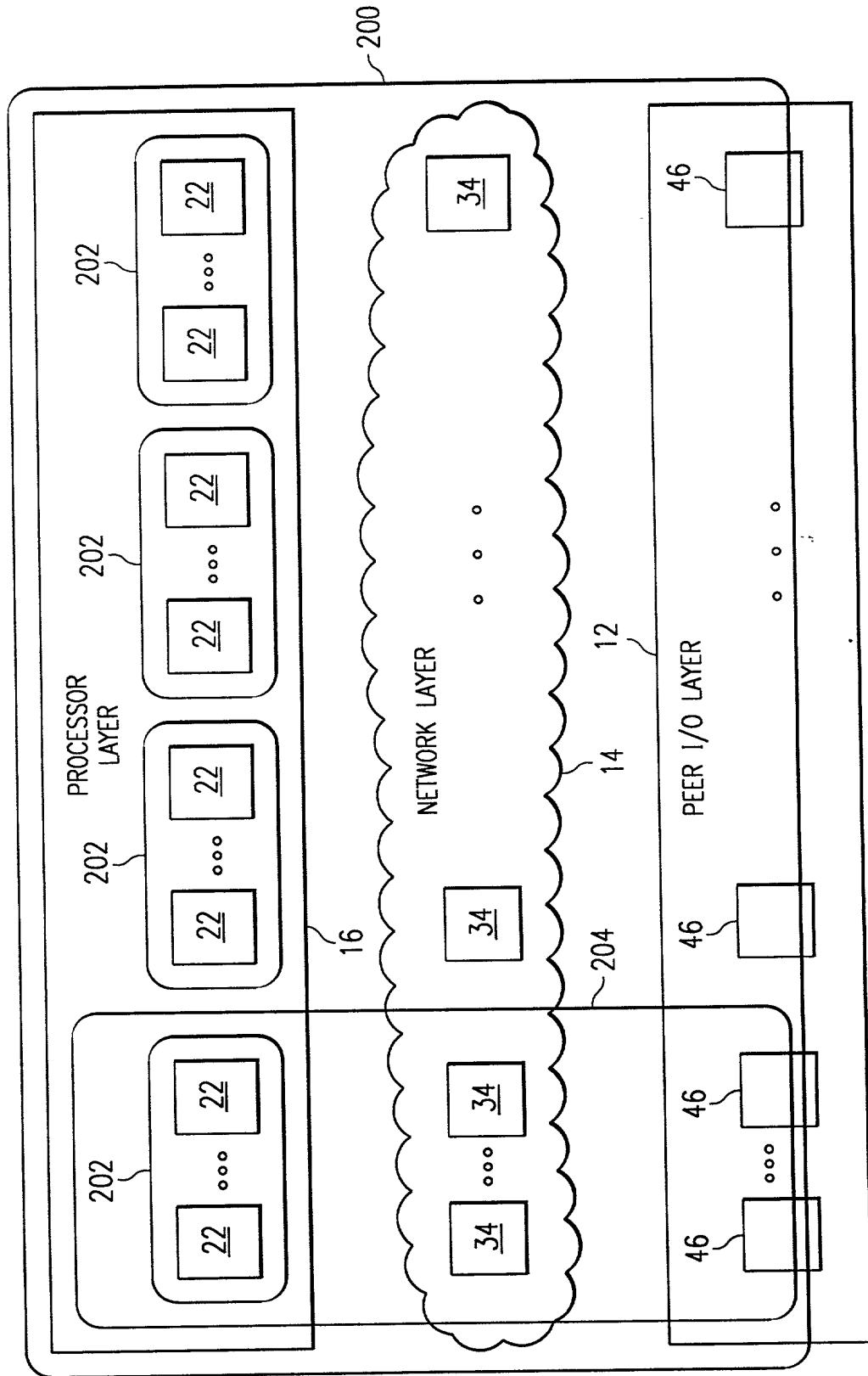


FIG. 7

FIG. 8



902		904	906		900	
GROUP		NAME	DESCRIPTION			
910	READ	SHARED	READ	READ		910a
			RDSHD	READ SHARED		
		EXCLUSIVE	RDEXC	READ EXCLUSIVE		910b
			RDXRO	EXCLUSIVE READ-ONLY TIMED		
			RDXRN	EXCLUSIVE READ-ONLY UNTIMED		
		GET	GET	READ INVALID		910c
			GETF	READ INVALID, FORCED		
		etc.	AMOR	ATOMIC MEMORY OPERATION, READ		910d
			NCRD	NON-COHERENT READ		
		912	WRITE	WRITEBACK	WRBK	WRITEBACK
WRBKR	WRITEBACK, CONCURRENT READ OUTSTANDING					
IWE	IMPLICIT WRITEBACK EXCLUSIVE					
RQSH	CEX DROP (RELINQUISH)					
RQSHR	CEX DROP, CONCURRENT READ OUTSTANDING					
PUT	PUT			WRITE INVALIDATE		912b
	PFCL			CACHE LINE FLUSH		
ETC.	AMOW			ATOMIC MEMORY OPERATION, WRITE		912c
	NCWRD			NON-COHERENT WRITE, DOUBLEWORD		
	NCWRF			NON-COHERENT WRITE, CACHE LINE		
914	PROBE	SHARED	INTER	INTERVENTION SHARED		914a
		EXCLUSIVE	INEXC	INTERVENTION EXCLUSIVE		914b
			FLSH	FLUSH		
			ERASE	ERASE		
		GET	ININV	INTERVENTION INVALID		914c
			ININF	INTERVENTION INVALID, FORCED		
		ETC.	INVAL	INVALIDATE		914d
916	INVAL GENERATION	BINEV	BACKOFF INVALIDATE ECHO, VECTOR FORMAT			
		LINW	LOCAL BLOCK INVALIDATE VECTOR			

FIG. 9

FIG. 10A

1000		1002	1004	1006
		GROUP	NAME	DESCRIPTION
1010	READ	SHARED	SRPLY	SHARED REPLY
			SRESP	SHARED RESPONSE
			SACK	SHARED ACKNOWLEDGE
			BINTR	BACKOFF INTERVENTION SHARED
		EXCLUSIVE	ERPLY	EXCLUSIVE REPLY
			ESPEC	EXCLUSIVE SPECULATIVE REPLY
			ERESP	EXCLUSIVE RESPONSE
			EACK	EXCLUSIVE ACKNOWLEDGE
			ERPYP	EXCLUSIVE REPLY, SEND PRGE
			BIEXC	BACKOFF INTERVENTION EXCLUSIVE
			BINWV	BACKOFF INVALIDATE, VECTOR FORMAT
			BINVP	BACKOFF INVALIDATE, POINTER FORMAT
		GET	IRPLY	INVALID REPLY
			ISPEC	INVALID SPECULATIVE REPLY
			IRESP	INVALID RESPONSE
			IACK	INVALID ACKNOWLEDGE
			NACKG	NEGATIVE ACKNOWLEDGE TO GET
			BIINV	BACKOFF INTERVENTION INVALID
			BIINF	BACKOFF INTERVENTION INVALID FORCED
		ETC.	AARP	AMO READ REPLY
			NCRP	NON-COHERENT READ REPLY
			NACK	COHERENT READ NEGATIVE ACKNOWLEDGE
1012	WRITE	WRITEBACK	WBACK	WRITEBACK ACKNOWLEDGE
			WBBACK	WRITEBACK BUSY ACKNOWLEDGE
		PUT	WACK	WRITE INVALIDATE ACKNOWLEDGE
			WACKP	WRITE INVALIDATE ACK, SEND PRGE
			WNACK	WRITE INVALIDATE NEGATIVE ACKNOWLEDGE

TO FIG. 10B

1000

FIG. 10B

FROM FIG. 10A

1012	WRITE	PUT	BFLSH	BACKOFF FLUSH	1012b
			BERSE	BACKOFF ERASE	
		ETC.	AWAK	AMO WRITE ACKNOWLEDGE	1012c
			NCWAK	NON-COHERENT WRITE ACKNOWLEDGE	
		1014	PROBE	SHARED	SHWB
DNGRD	DOWNGRADE				
SHWBR	SHARING WRITEBACK, PRIOR WB PENDING				
DNGDR	DOWNGRADE WITH PRIOR WB PENDING				
EXCLUSIVE	PRGE			PURGE	1014b
	XFER			OWNERSHIP TRANSFER	
	PRGER			PURGE WITH PRIOR WB PENDING	
	XFERR			OWNERSHIP TRANSFER, PRIOR WB PENDING	
	IWACK			IMPLICIT WRITEBACK RACE ACKNOWLEDGE	
GET	IIACK			INTERVENTION INVALID ACK	1014c
ETC.	IVACK			INVALIDATE ACK	1014d
1016	ERROR	PERR	POISONED ACCESS ERROR		
		AERR	READ PROTECTION VIOLATION ERROR		
		WERR	WRITE PROTECTION VIOLATION ERROR		
		DERRR	DIRECTORY ERROR ON A READ REQUEST		
		DERRW	DIRECTORY ERROR ON A WRITE REQUEST		

FIG. 11

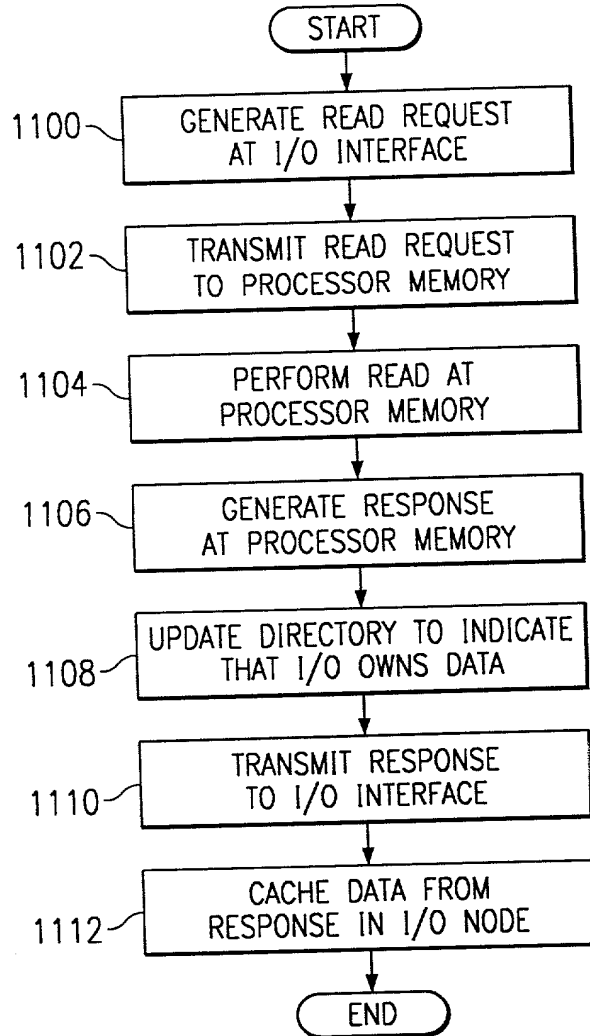


FIG. 12

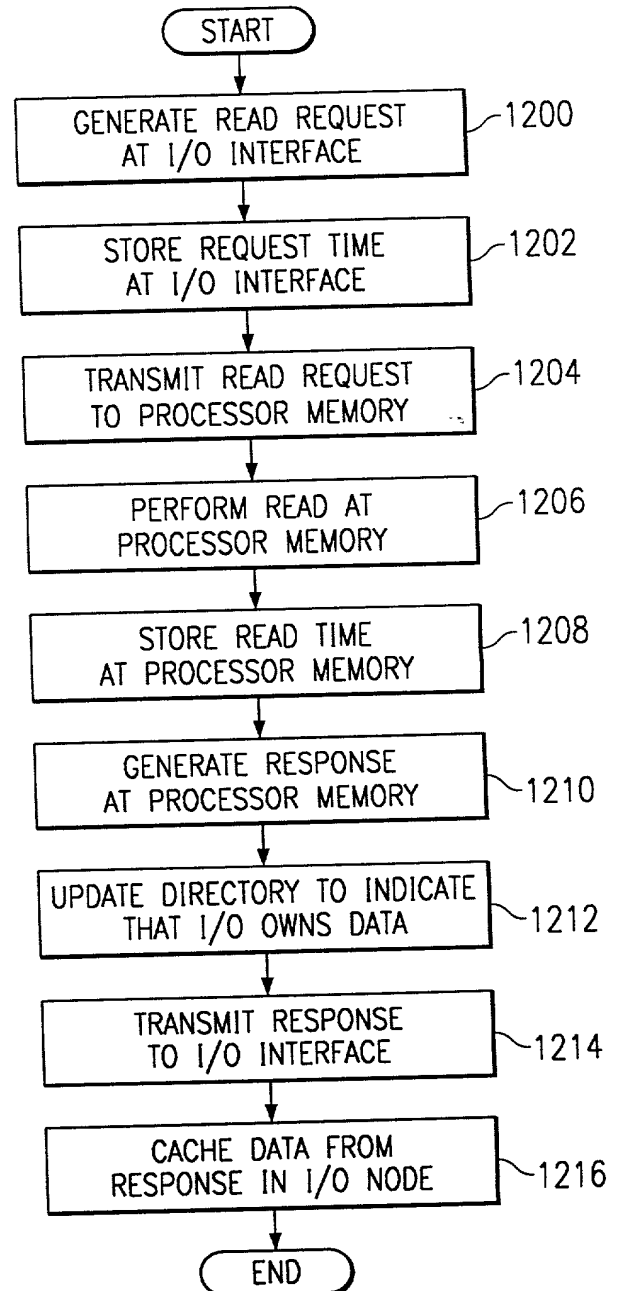


FIG. 13

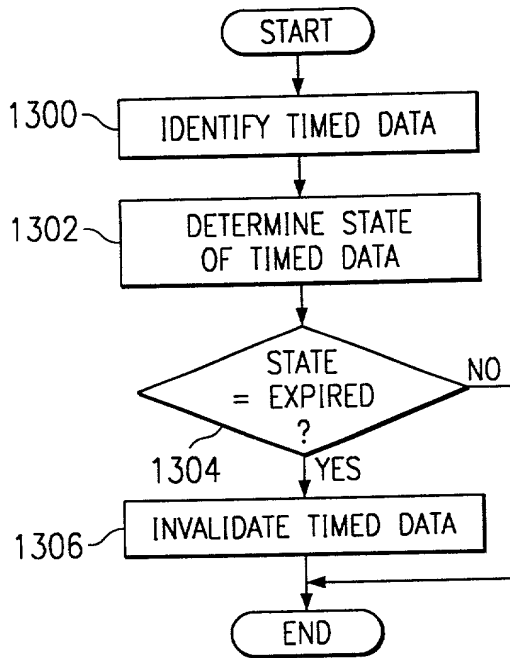


FIG. 14

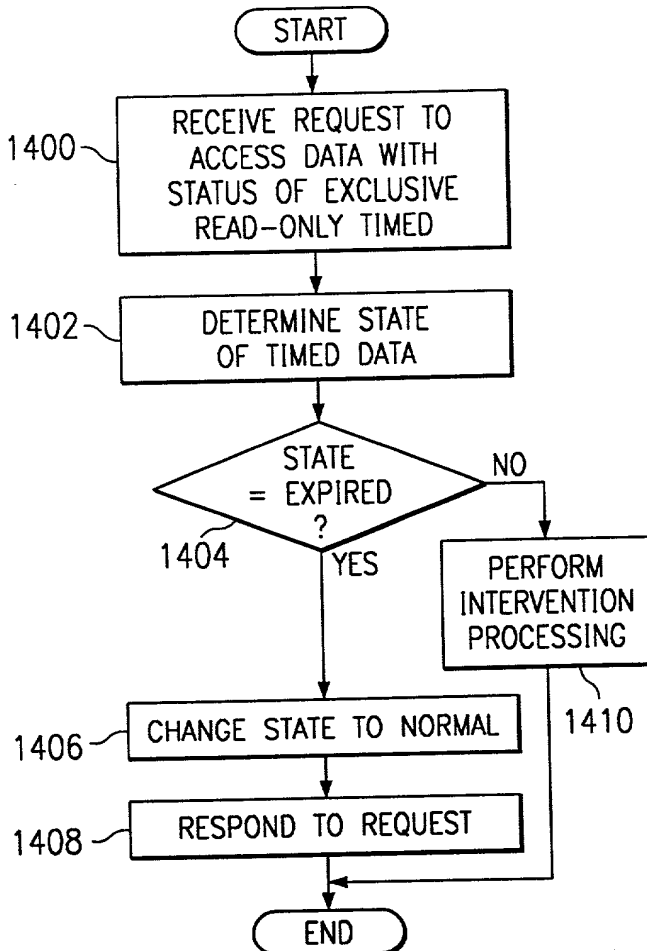


FIG. 15

